PRELIMINARY AMENDMENT

IN THE SPECIFICATION:

Please replace the title with the following new title:

A1

IMMUNOLOGIC ACTIVITIES
OF RHESUS CYTOMEGALOVIRUS ENCODED IL-10

Please replace paragraph 48 with the following rewritten paragraph:

A2

As used herein, "rhesus cytomegalovirus interleukin 10" or "rhesus CMV IL-10" is defined as a protein which has an amino acid sequence having substantial identity to a known sequence of rhesus CMV IL-10 as described in Lockridge *et al.*, *Virology* (2000) 268:272-280, which is incorporated herein by reference. For the purposes of this invention, some methods use glycosylated (*e.g.*, produced in eukaryotic cells such as yeast or CHO cells) rhesus CMV IL-10 and some methods use unglycosylated (*e.g.*, chemically synthesized or produced in prokaryotic cells, such as *E. coli*) rhesus CMV IL-10.

Please replace paragraph 49 with the following rewritten paragraph:

A3

As used herein, "human cytomegalovirus interleukin 10" or "human CMV IL-10" is defined as a protein which has an amino acid sequence having substantial identity to a known sequence of human CMV IL-10 as discussed in Kotenko *et al.*, *PNAS* (2000) 97(4):1695-1700, which is incorporated herein by reference. For the purposes of this invention, some methods use glycosylated (*e.g.*, produced in eukaryotic cells such as yeast or CHO cells) human CMV IL-10 and some methods use unglycosylated (*e.g.*, chemically synthesized or produced in prokaryotic cells such as *E. coli*) human CMV IL-10.

Please replace paragraph 67 with the following rewritten paragraph:

A4

Rhesus and human CMV IL-10 can be used in a number of *in vitro* or *ex vivo* methods. In some methods, cellular responses to these agents are analyzed to provide information to optimize dosage regimes of these agents *in vivo*. In some methods, rhesus and

human CMV IL-10 are used as positive controls to screen other drugs for effects on lymphocyte proliferation. If the positive control inhibits proliferation of the lymphocytes, whereas a candidate drug does not in a parallel reaction, then it can be concluded that the test drug is ineffective. In other methods, rhesus and human CMV IL-10 are used as research reagents to inhibit proliferation of cells and thereby analyze underlying cellular processes associated with cellular physiology. In other methods, proliferating PBMCs are obtained from a patient with an immune disorder. The lymphocytes are treated with rhesus CMV IL-10 or human CMV IL-10 ex vivo and then returned to the patients.

Please replace paragraph 70 with the following rewritten paragraph:

--Immune disorders preventable or treatable by methods of the invention include, but are not limited to, the following--

Please replace paragraph 82 with the following rewritten paragraph:

--Defects in the functioning of the cell-mediated immune response have been implicated in various cell-mediated cytotoxicity immune diseases, such as graft-versus-host disease. Cytotoxic T lymphocytes (CTLs) are generated by the activation of T cytotoxic (T_c) cells. CTLs have lytic capability and are critical in the recognition and elimination of altered self-cells (*e.g.*, virus-infected cells and tumors). Cytotoxic T lymphocytes (CTLs) are generally $CD8^+$ are therefore class I MHC restricted. Since virtually all nucleated mammalian cells express class I MHC molecules, CTLs can recognize and eliminate almost any altered mammalian cell. This ability of CTLs to recognize and eliminate almost any altered mammalian cell can result in cell-mediated cytotoxicity related immune diseases. Consequently, a decrease in cell surface expression of class I MHC molecules is expected to ameliorate or prevent cell-mediated cytotoxicity related diseases. Thus, decreasing cell surface expression of class I MHC molecules in a patient suffering from a cell-mediated cytotoxicity immune disease by administering an effective dosage of rhesus CMV IL-10 or human CMV IL-10 would be beneficial.

Please replace paragraphs 83 and 84 with the following rewritten paragraphs:

A7

1. Graft-versus-Host Disease

Graft-versus-host disease (GVHD) occurs as a result of *in vivo* cell-mediated cytotoxicity. The disease develops when immunocompetent lymphocytes are introduced into an allogeneic recipient whose immune system is compromised. The grafted lymphocytes begin to attack the recipient and the recipient's compromised state prevents an immune response against the graft. The grafted lymphocytes are carried to the spleen, where they begin to proliferate in response to the allogenetic MHC antigens of the recipient. This proliferation induces an influx of recipient cells to the spleen and results in splenomegaly. The intensity of GVHD can be quantitated by calculating the spleen index (SI). A spleen index of 1.3 or greater is considered to be indicative of GVHD. Enlargement of the spleen is a result of proliferation of both $CD4^+$ and $CD8^+$ T-cell populations.

Please replace paragraph 94 with the following rewritten paragraph:

A8

DTH plays an important role in host defense against intracellular pathogens. A variety of pathogens and contact antibodies can induce a DTH response. The initial immune response is nonspecific and often results in significant damage to healthy tissue. Although healthy tissue can be damaged, the patient can successfully eliminate cells infected by intracellular pathogens. When this defense process is not entirely effective, the continued presence of the pathogen's antigens can provoke a chronic DTH reaction. The chronic DTH reaction is characterized by excessive numbers of macrophages and the continued release of lytic enzymes resulting in tissue destruction. Thus, the DTH response to an intracellular pathogen can cause such extensive tissue damage that the DTH response is a pathologic condition. The granulomatous skin lesion seen with *Mycobacterium leprae* and the lung cavitation seen with *Mycobacterium tuberculosis* infections are examples of such pathology resulting from a chronic DTH reaction. Chronic DTH responses can result in granulomatous disease.

Please replace paragraph 285 with the following rewritten paragraph:

A9

Murine Model for Graft -Versus-Host Disease